

DECLARATION OF EMERGENCY
Department of Natural Resources
Office of Conservation

AMENDMENT TO STATEWIDE ORDER NO. 29-B (EMERGENCY RULE)

Order requiring a waste profile analysis of exploration and production (E&P)
waste prior to shipment to a commercial facility, and waste verification testing
upon receipt by a commercial facility

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Pursuant to the power delegated under the laws of the State of Louisiana, and particularly Title 30 of the Revised Statutes of 1950, as amended, and in conformity with the provisions of the Louisiana Administrative Procedure Act, Title 49, Sections 953(B)(1) and (2), 954(B)(2), as amended, the following emergency rule and reasons therefor are now adopted and promulgated by the Commissioner of Conservation as being necessary to protect the public health, safety and welfare of the people of the State of Louisiana, as well as the environment generally, by establishing a revised procedure for testing of exploration and production (E&P) waste prior to shipment and verification testing after receipt of such E&P waste at a commercial facility.

A. NEED AND PURPOSE FOR EMERGENCY RULE

Oil and gas exploration and production waste (E&P waste) is exempt from the hazardous waste regulations under the Resource Conservation and Recovery Act (RCRA). This exemption is based on findings from a 1987-1988 Environmental Protection Agency (EPA) study that determined this type of waste does not pose a significant health or environmental threat when properly managed. The study also determined that these wastes are adequately regulated under existing federal and state programs.

Existing Louisiana State regulations governing the operations of commercial E&P waste disposal facilities (Statewide Order No. 29-B) require only very limited testing of the waste received for treatment and disposal at each commercial facility. Such limited testing finds its basis in the above-mentioned national exemption for E&P waste recognized by the EPA. However, public concern as to the possible toxicity of such waste and the possible health effects on the public and the environment warrant a new look at E&P waste generation, transportation and disposal in the State of Louisiana.

Working with the Louisiana Department of Environmental Quality (DEQ) and the Louisiana Department of Health and Hospitals (DHH), a two-phased testing program for all types of E&P waste disposed of at commercial E&P waste disposal facilities within the State of Louisiana has been designed and will be implemented by the Office of Conservation. E&P waste will be tested both for toxicity characterization and for E&P source verification. The new testing program will be known as Statewide Order No. 29-B Emergency Rule.

The Emergency Rule was drafted during the time interval of October 3, 1997 through December 31, 1997 by Staff of the Office of Conservation, with technical input from Conservation's contract laboratory and contract toxicologist, DEQ Staff and DHH Staff. Baseline information was obtained from a statewide sampling and testing program for all types of E&P waste from 89 sites of generation throughout Louisiana, including offshore (Phase-one).

Analytes chosen for the baseline testing program were selected from recommendations by Conservation's contract toxicologist, with concurrence from both DEQ and DHH. EPA's Toxicity Characteristic Leaching Procedure (TCLP) was conducted during the testing program to provide estimates of 1) the extent to which chemicals in each E&P waste material are leachable/soluble, 2) the extent to which E&P waste material presents a threat to groundwater, and 3) the extent to which the inorganic chemicals in each waste material are bioavailable for absorption into the body. Emphasis was placed on correct laboratory procedural methodology and quality control throughout the sampling and testing period. In addition to the Conservation test results, analytical data available from the EPA, the American Petroleum Institute and the Gas Research Institute provided the rationale for determining the technical basis for the new testing requirements.

Statewide Order No. 29-B Emergency Rule (Phase-two) will provide requirements for continued E&P waste characterization and verification testing. After implementation of the Emergency Rule, Conservation will initiate rulemaking to promulgate new permanent regulations which will recognize and encourage new and innovative ways to properly manage E&P waste. Best management practices will be the measure of acceptability for both existing and emerging technologies. Analytical data generated during the effective term of the Emergency Rule, along with best management practices, will be used to determine the limits for waste constituents received at commercial E&P waste disposal facilities.

B. SYNOPSIS OF EMERGENCY RULE

1. E&P Waste To Be Tested For Characterization

As a key provision of the Emergency Rule, a waste profile must be developed for each specific testing batch of E&P waste proposed for disposal at a commercial facility in the State. Based on the results of the Conservation sampling and testing program, as well as Staff expertise, five (5) different groups of analytical procedures have been established. Depending on the chemical complexity of a specific testing batch, applicable testing procedures are required to establish the waste profile for each testing batch.

In order to not unnecessarily delay drilling operations utilizing closed mud systems with limited on-site storage systems, or in emergency situations, provisions have been made to allow documentation of testing procedures to be submitted to the receiving commercial facility within 10-days after setting of the surface casing. Such provision is reasonable because only native water base drilling muds are commonly used at the startup of drilling operations and prior to setting of surface casing. Additionally, alternate sampling and testing protocols consistent with Emergency Rule standards may be authorized by the Office of Conservation upon written request. For example, formation of testing batches at a transfer or commercial facility site may be proposed as an alternative to formation of testing batches at the site of generation.

Produced water, produced formation fresh water and other E&P waste fluids are exempt from certain provisions of the testing requirements provided they are: 1) stored and transported in enclosed tank trucks, barges, or other enclosed containers, 2) stored in enclosed tanks at a commercial facility, and 3) disposed by deepwell injection. Such provision is reasonable because, provided the above conditions are met, exposure to the public and to the environment would be minimal.

2. E&P Waste Will Be Transported With Identification

The rule primarily requires that each E&P waste shipping unit transported from the site of generation to a commercial facility will be accompanied by a copy of the waste profile (Form UIC-35) and an Oilfield Waste Shipping Control Ticket (UIC-28, Manifest) and presented to the facility operator before offloading. Timely filings of required laboratory reports will be made to the Office of Conservation.

3. Each Load of E&P Waste Will Be Tested At Commercial Facility

Before offloading at a commercial E&P waste disposal facility and in order to verify that the waste qualifies for the E&P category, each E&P waste shipping unit shall be sampled for required parameters. Additionally, an Organic Vapor Analyzer (OVA) meter reading (calibrated for benzene), shall be taken. Appropriate records of tests shall be kept at each commercial facility for review by the Office of Conservation.

C. REASONS

Recognizing the potential advantages of a testing program for the characterization of exploration and production (E&P) waste that is fully protective of public health and the environment, and recognizing the potential advantages of a testing program that adequately characterizes such waste as to its potentially toxic constituents, it has been determined that failure to establish such procedures in the form of an administrative rule may lead to the existence of an imminent peril to the public health, safety and welfare of the people of the State of Louisiana, as well as the environment generally.

Protection of the public and our environment therefore requires the Commissioner of Conservation to take immediate steps to assure that adequate testing is performed before E&P waste is treated or otherwise disposed of in a commercial facility. The emergency rule, Amendment to Statewide Order No. 29-B (EMERGENCY RULE) set forth hereinafter is now adopted by the Office of Conservation.

Notwithstanding the above, it is necessary to allow the affected industry adequate time to prepare for implementation and compliance with the Emergency Rule. Time must be allowed for establishing test equipment and qualified personnel, contracting with laboratories, training of personnel, and possible modification of exploration and production schedules and procedures. For the above reasons, enforcement of said EMERGENCY RULE will commence 45-days after the effective date.

D. EMERGENCY RULE

Title 43

NATURAL RESOURCES

Part XIX. Office of Conservation - General Operations

Subpart 1. Statewide Order No. 29-B

Chapter 1. General Provisions

§129. Pollution control

§129.B.1 Definitions

Container - A pit, truck, barge or other receptacle used to initially store E&P waste at the site of generation.

Drilling Waste - Water base mud, oil base mud, or other drilling fluids and cuttings generated during the drilling of wells.

NOW - nonhazardous oilfield E&P waste

Nonhazardous oilfield Exploration and Production (E&P) waste - as defined in §129.M.1

Testing Batch - an accumulation of an E&P waste type generated in association with exploration and production operations, or a mixture of such waste types, which is temporarily retained at the site of generation in a container, quantified as follows:

(a) Formation of a testing batch begins when E&P waste, except drilling waste, is first entered into a container at the site of generation and ends when the container, or some or all of the contents of the container, is shipped to a commercial facility. After the testing batch is identified, no additional waste may be added to the container until all of the contents of the container have been shipped.

(b) In the case of drilling waste, each type of mud system (water base, oil base or other) together with cuttings and fluids associated with such system, shall constitute a separate testing batch. Drilling waste shall be sampled during drilling operations at a depth below the surface casing. Shipments of a portion of a drilling waste testing batch will not constitute formation of a separate testing batch.

Shipping unit - an individual shipment of a portion or the entirety of an identified E&P waste test batch to a commercial facility.

[See Prior Text in B.2.a-m]

§129.B.2.n E&P Waste Characterization Procedures

i. All E&P waste generated within or without the State of Louisiana including offshore Louisiana (both state and federal waters) and proposed to be disposed of at a commercial facility in the State of Louisiana must be sampled in accordance with EPA protocols or Office of Conservation's approved procedures and tested by a laboratory not owned or operated by a waste generator.

ii. The following procedures are to be utilized as applicable to characterize each E&P testing batch prior to shipment offsite to a commercial facility:

Procedure A: The physical characteristics of each testing batch of E&P waste must be identified as to the following:

color
odor - none, mild, strong
specific gravity
texture - smooth, soil like, layered, etc .
turbidity - clear, cloudy, or muddy
viscosity - low, medium or high

Procedure B: each test batch of E&P waste must be analyzed for the following parameters:

pH
electrical conductivity (EC - mmhos/cm)
chloride (Cl) content

Procedure C: each testing batch of E&P waste must be analyzed for the following parameters:

oil and grease (% by weight)
total sulfide (ppm)
reactive sulfide (ppm)

Procedure D: each testing batch of E&P waste must be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the following volatile organics:

<u>Benzene</u>	<u>n-Hexane</u>
<u>Cyclohexane</u>	<u>Toluene</u>
<u>Ethylbenzene</u>	<u>Xylenes</u>

Procedure E: each testing batch of E&P waste must be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the following metals:

<u>Arsenic</u>	<u>Lead</u>
<u>Barium</u>	<u>Mercury</u>
<u>Cadmium</u>	<u>Selenium</u>
<u>Chromium</u>	<u>Silver</u>

iii. The following table indicates which testing procedures in §129.B.2.n.ii above are to be utilized to characterize E&P waste before shipment to a commercial facility for treatment or disposal:

Waste Type/Description	Required Testing Procedures
01 - Salt Water (produced brine or produced water)	A and B*
02 - Oil base mud / cuttings	A, B, C, D and E
03 - Water base mud / cuttings	A, B, C and E
04 - Workover / completion fluids	A, B, C and D
05 - Production pit sludge	A, B, C, D and E
06 - Production tank sludge	A, B, C, D and E
07 - Produced sand / solids	A, B, C, D and E
08 -Produced formation fresh water	A and B*
09 - Rainwater - ring levees/pits	A, B and C
10 - Washout water	A, B and C
11 - Washout pit water	A, B, C and D
12 - Gas plant processing waste	A, B, C, D and E
13 - BS&W waste from approved commercial salvage oil operators	A, B, C, D and E
14 - Pipeline test water & pipeline pig water	A, B, C, D and E
15 - E&P waste generated by permitted commercial facilities	A, B, C and D
16 - Crude oil spill clean-up waste	A, B, C, D and E
99 - UIC-23 approved waste (other)	A, B, C, D and E

* Based on closed waste fluid system as provided in §129.B.2.n.vi.

iv. If a testing batch is composed of more than one type of E&P waste, the testing procedures applicable to all types of waste in the testing batch shall be utilized to characterize the waste before shipment.

v. A waste profile (Form UIC-35), must be completed to document the analyses required in this Section. A copy of the waste profile must accompany each E&P waste shipping unit to a commercial facility and must be presented to the facility operator before off-loading, except as provided in §129.B.2.n.vii below. A copy of the laboratory reports of required E&P waste analyses shall be submitted to the Office of Conservation by the generator or commercial facility operator, where applicable, within fifteen (15) days of the first shipment of, or from, each testing batch.

vi. Produced water, produced formation fresh water, and other E&P waste fluids are exempt from the requirements of §129.B.2.n.iii.Procedures C, D and E under the following conditions: 1) if stored and transported by the generator or transporter in

enclosed tank trucks, barges, or other enclosed containers; 2) if stored in enclosed tanks at a commercial facility; and 3) if disposed by deep well injection. Procedures A and B may be utilized either upon shipment or upon arrival at the commercial facility.

vii. In well drilling operations which utilize a closed mud system with limited on-site storage capacity, or in an emergency situation, documentation of compliance with testing Procedures A, B, C, D and E on Form UIC-35 must be submitted to the commercial facility within ten (10) days after the setting of surface casing.

viii. Except for the provisions of §129.B.2.n.vi above, E&P waste generated out-of-state , except offshore Louisiana (both state and federal waters), and transported to a Louisiana commercial facility for treatment or disposal must be tested for the parameters required in Procedures A, B, C, D and E above.

ix. Alternate sampling and testing protocols consistent with the above standards may be authorized by the Office of Conservation upon written request by an operator or commercial facility. Written authorization must be received prior to initiating alternate sampling and testing protocols.

[See Prior Text in B.3 - B.6.d.iii]

§129.B.6.d Laboratory Procedures for ~~Nonhazardous Oilfield~~ E&P Waste

iv. For total sulfides, samples shall be analyzed according to SW 846, Method 9030 and 9031 or latest revision by EPA;

v. For reactive sulfides, samples shall be analyzed according to SW 846, Chapter 7, Section 7.3.4 or latest revision by EPA.

vi. TCLP samples shall be analyzed according to EPA document "Test Methods for Evaluating Solid Waste, S. W. 846", Third Edition, Revised 12/96 or latest revision by EPA.

(a) For TCLP metals, samples are to be extracted according to SW 846 Method 1311, then digested according to SW 846 series 3000 or latest revision by EPA.

(b) Upon completion of the extraction and digestion phases, metals are to be analyzed according to SW 846 methodology series 6000 and/or 7000 or latest revision by EPA.

(c) TCLP organics are to be extracted according to SW 846 Method 1311 or latest revision by EPA. Analytes are to be analyzed according to SW 846 Method 8260 or latest revision by EPA.

[See Prior Text in B.6.e - L]

vii. Except as herein provided otherwise, sampling and testing procedures should comply with Office of Conservation manual “Laboratory Procedures for Analysis of Nonhazardous Oilfield Waste” or latest revision.

M. Off-site Storage, Treatment and/or Disposal of ~~Nonhazardous Oilfield~~ E &P Waste Generated From Drilling and Production of Oil and Gas Wells

1. Definitions

[See Prior Text in Definitions]

~~Nonhazardous Oilfield Waste~~ Exploration and Production (E&P) Waste - drilling fluids, produced water, and other waste associated with the exploration, development, or production of crude oil or natural gas and which is not regulated by the provisions of the Louisiana Hazardous Waste Regulations. Such wastes include, but are not limited to, the following:

- a. salt water (produced brine or produced water), except for salt water whose intended and actual use is in drilling, workover or completion fluids or in enhanced mineral recovery operations;
- b. oil-base drilling mud and cuttings;
- c. water-base drilling mud and cuttings;
- d. drilling, workover and completion fluids;
- e. production pit sludges;
- f. production storage tank sludges;
- g. produced oily sands and solids;
- h. produced formation fresh water;
- i. rainwater from ring levees and pits at production and drilling facilities;
- j. washout water generated from the cleaning of vessels (barges, tanks, etc.) that transport ~~nonhazardous—oilfield~~ E&P waste and are not contaminated by hazardous waste or material;
- k. washout pit water and solids from oilfield related carriers that are not permitted to haul hazardous waste or material;
- l. natural gas plant processing (E&P) waste which is or may be commingled with produced formation water;
- m. waste from approved salvage oil operators who only receive oil (BS&W) from oil and gas leases;
- n. pipeline test water which does not meet discharge limitations established by the appropriate state agency, or pipeline pig water, i.e., waste fluids generated the cleaning of a pipeline;
- o. wastes from permitted commercial facilities;
- p. ~~material used in crude oil spill clean-up operations~~ waste;
- q. salvageable crude oil;
- r. other approved E&P waste.

Testing Batch - as defined in §129.B.

Shipping unit - as defined in §129.B.

§129.M.5. Criteria for the Operation of Commercial Facilities and Transfer Stations

i. Receipt, Sampling and Testing of E&P Waste

[See Prior Text in 129.M.2 - 5.i.i]

ii. Verification Testing Requirements

(a) Before offloading at a commercial facility or transfer station and in order to verify information on Form UIC-35, each E&P waste shipping unit shall be sampled and analyzed (by commercial facility personnel) for pH, conductivity, and chloride (Cl) content, the parameters required in Procedures A and B.

(b) An Organic Vapor Analyzer (OVA) meter reading (calibrated for Benzene) must also be performed.

(c) Records of these tests shall be kept on file at each facility for a period of three years and be available for review by the Commissioner or his designated representative.

[See Prior Text in 129.5.i.iii - 9]

E. SUMMARY

The EMERGENCY RULE hereinabove adopted evidences the finding of the Commissioner of Conservation that failure to adopt the above rules may lead to an imminent risk to public health, safety and welfare, and that there is not time to provide adequate notice to interested parties. However, the Commissioner of Conservation notes again that a copy of the permanent Amendment to Statewide Order No. 29-B will be developed in the near future, with a public hearing to be held as per the requirements of the Administrative Procedure Act.

The Commissioner of Conservation concludes that the above EMERGENCY RULE will better serve the purposes of the Office of Conservation as set forth in Title 30 of the Revised Statutes, and is consistent with legislative intent. The adoption of the above EMERGENCY RULE meets all the requirements provided by Title 49 of the Louisiana Revised Statutes. The adoption of the above EMERGENCY RULE is not intended to affect any other provisions, rules, orders, or regulations of the Office of Conservation, except to the extent specifically provided for in this EMERGENCY RULE.

Within five days from date hereof, notice of the adoption of this EMERGENCY RULE shall

be given to all parties on the mailing list of the Office of Conservation by posting a copy of this EMERGENCY RULE with reasons therefor to all such parties. This EMERGENCY RULE with reasons therefor shall be published in full in the *Louisiana Register* as prescribed by law. Written notice has been given contemporaneously herewith notifying the Governor of the State of Louisiana, the attorney general of the State of Louisiana, the Speaker of the House of Representatives, the President of the Senate and the State Register of the adoption of this EMERGENCY RULE and reasons for adoption.

F. EFFECTIVE DATE AND DURATION

1. The effective date for this EMERGENCY RULE shall be _____.

2. The EMERGENCY RULE herein adopted as a part thereof, shall remain effective for a period of not less than 120 days hereafter, or until the adoption of the final version of an amendment to Statewide Order No. 29-B as noted herein, whichever occurs first.

Signed at Baton Rouge, Louisiana, this _____ day of _____, 1998.

Warren A. Fleet
Commissioner of Conservation

1/12/98